

Appln No. 09/839,944

Amdt date October 6, 2003

Reply to Office action of June 4, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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1. (Currently Amended) ~~[In—a]~~ A content indexing structure ~~[for analyzing information on features of respective contents and arranging the contents in order for a user to easily access the content, a circular index structure]~~ comprising:

a first indexing level having a plurality of first level content indexes connected in a substantially circular manner, one of the first level content indexes representing a particular category associated with a particular feature; and

a second indexing level having a plurality of second level content indexes, each of the second level content indexes having a weighing value indicative of an association with the first level content index representing the particular category, the plurality of second level content indexes being arranged in a substantially circular manner according to the weighing value

~~[a virtual contents index arranged in a circular method for the user's easy access after the contents are classified according to categories; and~~

~~— physical contents dependent on a bottom index of the virtual context index, and moving to corresponding contents according to the user's selection of the contents].~~

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2. Cancelled

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3. (Currently Amended) The structure of claim 1, wherein the ~~[categories are provided on the indexes according to statistical data by]~~ category is selected from a group consisting of types, keywords, viewing patterns and [databases analyzed by the contents and] database reference data.

4. (Currently Amended) The structure of claim 1, wherein ~~[movements] moving between [the] contents [are directed from a top contents index]~~ indexed by the content indexing structure includes moving from the first indexing level to the [bottom contents index] second indexing level or from the [bottom contents index] second indexing level to the [top contents index] first indexing level according to [the] a user's manipulations of an input device.

5. (Currently Amended) The structure of claim 1, wherein ~~[movements] moving between [top] contents indexed at the first indexing level includes moving an input device [are directed]~~ in a clockwise or counterclockwise direction between ~~[the respective contents]~~ associated first level content indexes in a [circle] substantially circular manner according to [the] a user's manipulations of the input device.

6. (Currently Amended) The structure of claim 1, wherein ~~[movements] moving between [the bottom contents are directed]~~ contents indexed at a second indexing level includes moving an

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B' input device in a clockwise or counterclockwise direction between ~~[the respective contents]~~ associated second level content indexes in a circle according to ~~[the]~~ a user's manipulations of the input device.

7. (Currently Amended) The structure of claim 1, wherein when a present indexing level ~~[of the contents is moved to a higher or a lower level]~~ is changed according to ~~[the]~~ a user's manipulation of an input device, [top and bottom index relationships] a relationship of the first and second indexing levels with respect to the present indexing level [are reestablished] is updated after the movement.

8. (Currently Amended) ~~[In a contents display system for receiving a plurality of contents from media such as a digital television, a cable television broadcast and network contents, analyzing information on the contents, storing the contents in a memory as a database, and outputting the stored contents according to a user's access, a]~~ A contents display system comprising:

a memory;

a contents features analyzer for analyzing features of at least one [contents unit] content provided from a media source [the outside,] and storing information on the analyzed features and information on [physical contents] one or more content indexes for [moving to corresponding contents in] accessing the content from the memory; and

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b' a ~~[contents]~~ content selector for ~~[extracting]~~ retrieving the ~~[contents]~~ content corresponding to the ~~[information on the physical contents using the feature information]~~ content index stored in the memory according to ~~[the]~~ a user's request~~[, for switching the contents and outputting the contents.],~~ wherein indexes are generated according to a content indexing structure based on the analyzed features, the content indexing structure including:

a first indexing level having a plurality of first level content indexes connected in a substantially circular manner, one of the first level content indexes representing a particular category associated with a particular feature; and

a second indexing level having a plurality of second level content indexes, each of the second level content indexes having a weighing value indicative of an association with the first level content index representing the particular category, the plurality of second level content indexes being arranged in a substantially circular manner according to the weighing value.

9. (Currently Amended) The system of claim 8, wherein ~~[the feature information comprises:]~~

~~[at least one top contents index which is set as representative contents information and that]~~ the first level content index representing the particular category best exemplifies the particular feature[s] of the category~~[among at least one kind of contents information classified according to predetermined categories, and is arranged in a circular manner in order for a user to easily access it; and]~~

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~~at least one bottom contents index which is the remaining general virtual contents, compared and analyzed by category representative features, first comparison features (features common to counterclockwise adjacent contents) and second comparison features (features common to clockwise adjacent contents) according to the features of the categories among at least one kind of contents information classified according to the categories, and which is adjacently located between the respective representative contents indexes according to an order of weighting values, and is dependent on the top contents index].~~

10. (Currently Amended) The system of claim 9, wherein the category ~~[includes]~~ is selected from a group consisting of types, keywords, viewing patterns and database references extracted from the ~~[contents]~~ content information.

11. (Currently Amended) The system of claim 9, wherein ~~[movements]~~ moving between ~~[the]~~ contents indexed by the content indexing structure includes moving ~~[are directed]~~ from the ~~[top contents index]~~ first indexing level to the ~~[bottom contents index]~~ second indexing level or from the ~~[bottom contents index]~~ second indexing level to the ~~[top contents index]~~ first indexing level according to ~~[the]~~ a user's manipulations of the contents selector.

12. (Currently Amended) The system of claim 9, wherein ~~[movements]~~ moving between ~~[the top contents are directed]~~

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contents indexed at the first indexing level includes moving the contents selector in [the] a clockwise and counterclockwise direction between [the top contents] associated first level content indexes according to [the] a user's manipulations of the contents selector.

13. (Currently Amended) The system of claim 9, wherein [movements] moving between [the bottom contents are directed] contents indexed at the second indexing level includes moving the contents selector in [the] a clockwise and counterclockwise direction between [the bottom contents] associated second level content indexes according to [the] a user's manipulations of the contents selector.

14. (Currently Amended) The system of claim 9, wherein when [the] a user moves to [another] a third indexing level [connected] coupled to the [top] first and [bottom contents indexes] second indexing levels, a relationship of the [top] first and [bottom contents relationships are] second indexing levels with respect to the third indexing level is changed.

15. (Currently Amended) The system of claim 9, wherein the contents selector comprises:

a [top] first contents selector for controlling [the] a display of [the corresponding] contents associated with the first level content indexes [using the physical contents information] when the [top contents index] first level content

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indexes stored in the memory [~~is~~] are selected according to [~~the~~] a user's manipulations; and

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a [~~bottom~~] second contents selector for controlling [~~the~~] a display of [~~the corresponding~~] contents associated with the second level content indexes [~~using the physical contents information~~] when the [~~bottom contents index~~] second level content indexes stored in the memory [~~is~~] are selected according to [~~the~~] a user's manipulations.

16. (New) The content indexing structure of claim 1, wherein a second level content index with a highest weighing value is logically coupled to the first level content index representing the particular category, the logical coupling allowing a user to traverse from the first indexing level to the second indexing level, or vice versa.

17. (New) The content indexing structure of claim 1, wherein ~~the~~ second level content index with the highest weighing value is most closely associated with the particular category.

18. (New) The content indexing structure of claim 1, wherein a first level content index associated with one category is logically coupled to another first level content index associated with another category.

19. (New) The content indexing structure of claim 1, wherein a second level content index associated with one

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category is logically coupled to another second level content index associated with another category.

B' 20. (New) The content indexing structure of claim 1, wherein a user traverses from the first level content index representing the particular category to a second level content index with the highest weighing value associated with the first level content index, and from the second level content index to another second level content index associated with a different category without reverting back to the first indexing level.

21. (New) The content indexing structure of claim 1, wherein a first or second level content index is used to retrieve corresponding content.

22. (New) The content indexing structure of claim 1, wherein the substantially circular manner is a circle.

23. (New) The content indexing structure of claim 1, wherein the substantially circular manner is an oval.

24. (New) The system of claim 9, wherein a second level content index with a highest weighing value is logically coupled to the first level content index representing the particular category, the logical coupling allowing a user to traverse from the first indexing level to the second indexing level, or vice versa.

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25. (New) The system of claim 9, wherein the second level content index with the highest weighing value is most closely associated with the particular category.

26. (New) The system of claim 9, wherein a first level content index associated with one category is logically coupled to another first level content index associated with another category.

27. (New) The system of claim 9, wherein a second level content index associated with one category is logically coupled to another second level content index associated with another category.

28. (New) The system of claim 9, wherein a user traverses from the first level content index representing the particular category to a second level content index with the highest weighing value associated with the first level content index, and from the second level content index to another second level content index associated with a different category without reverting back to the first indexing level.

29. (New) The system of claim 9, wherein a first or second level content index is used to retrieve corresponding content.

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30. (New) The system of claim 9, wherein the substantially circular manner is a circle.

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31. (New) The system of claim 9, wherein the substantially circular manner is an oval.

32. (New) A method of manipulating a user input device for traversing a circular indexing structure, the method comprising:

selecting a first indexing level having a plurality of first level content indexes connected in a substantially circular manner, one of the first level content indexes representing a particular category associated with a particular feature;

selecting the first level content index representing the particular category associated with the particular feature; and

moving the user input device to select a particular second level content index in a second indexing level associated with the selected first level content index, the second indexing level having a plurality of second level content indexes having a weighing value indicative of an association with the selected first level content index, the second level content indexes being arranged in a substantially circular manner according to the weighing value.

33. (New) The method of claim 32, wherein the selected particular second level content index has a highest weighing value.

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34. (New) The method of claim 32, wherein the selected particular second level content index is most closely associated with the particular category.

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35. (New) The method of claim 32, wherein a user traverses from the first level content index representing the particular category to the particular second level content index, and from the particular second level content index to another second level content index associated with a different category without reverting back to the first indexing level.

36. (New) The method of claim 32 further comprising using a first or second level content index is used to retrieve corresponding content.

37. (New) The method of claim 32, wherein the substantially circular manner is a circle.

38. (New) The method of claim 32, wherein the substantially circular manner is an oval.
